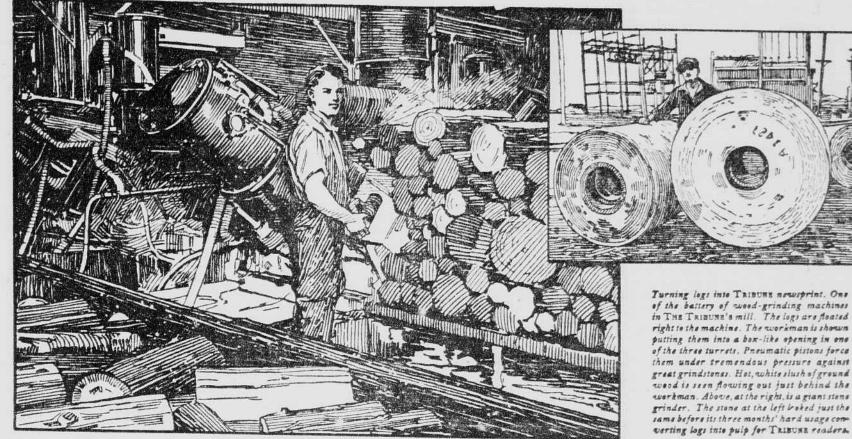
Chicago Tribume makes its own newsprint



NTO THE TRIBUNE'S great mill at Thorold, Ontario, go hundreds of thousands of electric horse-power from Niagara Falls, millions of

the Welland' Canal, train loads of coal, shiploads of logs, cars of sulphur and limestone and clay - and out of the mill streams paper at the rate of 600 to 1000 feet per minute from each of five machines.

The sheets delivered from the various machines range from 150 to 187 inches wide. This means that the product is the equivalent of a strip of paper one foot wide and five miles long every sixty seconds.

To produce the newsprint used in an average issue of The Sunday Tribune our paper mill consumes:

54 acres of timber 21 tons of sulphur

665 tons of coal 63,000 electric h.-p. 18,200,000 gallons of water

This great mill represents an investment of millions of dollars and employs 650 men. Its output is consumed by THE CHICAGO TRIBUNE, and THE TRIBUNE'S tabloid pictorial innovation-The Daily News of New York.

Every operation in the conversion of spruce logs into paper is carried out within the mill in order that the highest standards of quality may be constantly maintained.

Two kinds of wood pulp are used in making TRIBUNE newsprint-chemical



Shipping finished rolls. Frapped in special paper made as The Thisune the rolls are loaded into freight cars which run inside the mill within a few yards of the paper machine pictured at the top of the page. The bringing rate materials to the mill and taking away paper,

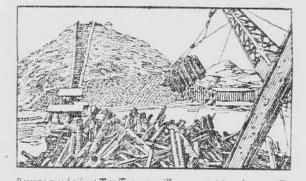
pulp and mechanical pulp. Chemical, or sulphite, pulp is obtained by chipping the logs and cooking the chips under heavy steam pressure in bisulphite of soda. This acid solution dissolves everything in the wood but the fine cellulose fibers.

gallons of water from It leaves these long and unbroken, Even the bisulphite liquor is manufactured in THE TRIBUNE'S mill by burning raw sulphur and sending the resulting gases up high towers, down which water trickles over masses of limestone.

Mechanical, or ground wood, pulp is obtained by forcing the side of a log against a huge grindstone whirling 250 revolutions per minute. This quickly reduces the log to a hot, mushy "slush."

This "slush" must be screened to remove the splinters and washed free of resinous material.

Ordinary newsprint contains 20% of chemical pulp, and 80% mechanical pulp.



dallars' worth of spruce logs. The crane at the right has just lifted a ham-mack full of logs from the desk of a steamer in the Welland Canal and is throwing them into the log pond. The logs are floated across the pond and taken up to the top of the pile by their conveyors, here shown in operation.

The quality of CHICAGO TRIBUNE newsprint is kept above the average by using 30% chemical to 70% mechanical pulp. Not only is the chemical pulp more expensive to manufacture, but a cord of wood makes only 1300 pounds of chemical, as compared with 2300 pounds of mechanical pulp. Thirty per cent is the greatest proportion of chemical pulp that can be used to advantage. A greater amount would produce a paper too fine in texture to absorb the ink from cylinder presses grinding out 72,000 papers an hour.

The chemical and mechanical pulp in proper proportions are mixed with clay, which acts as filling; alum for sizing, aniline dye for bleaching, and then sent to the paper machines. The Tribune's new newsprint

machine is said to be the fastest in the country. The pulp in a thin milky sheet, 150 inches wide, flows out on its screen and is converted into paper at the rate of 1000 feet per minute. This machine and the four others are driven by three shifts of men, twenty-four hours a day, to keep THE TRIBUNE supplied with paper.

The traffic department of THE TRIBUNE handles more than 10,000 cars a year, bringing raw materials to the mill and taking away paper.

victura. When it reaches the eft end the water

During the past two years THE CHICAGO TRIBUNE has labored under great handicaps in giving service to readers and advertisers.

The capacity of this great mill was overtaxed. Shortage of paper limited the amount of news, features and advertising that might have been printed. More than a million dollars' worth of advertising had to be omitted. Circulation growth was arbitrarily halted.

By the investment of millions of dollars in docks, ships, mills, paper-making machinery and a model new publishing plant, THE CHICAGO TRIBUNE has equipped. itself to render both to its readers and to its advertisers better service than ever before. During a period of unparalleled high prices, expense and effort have been subordinated to a determination that TRIBUNE service should be adequate - paper supply assured-press capacity ample.

Production costs have increased rather than decreased. Wages, paper and overhead were never higher. In compensation, THE TRIBUNE of 1921 will establish a new level of journalistic excellence-will be unquestionably the world's greatest newspaper.

ADVERTISING space in THE CHICAGO TRIBUNE is a commodity which involves the investment of enormous sums of money and the services of great numbers of people. It is an unique commodity in that money cannot duplicate it. Prestige won by THE CHICAGO TRIBUNE in the homes of The Chicago Territory has more vital bearing on the productiveness of a page advertisement in THE TRIBUNE than the seven tons of raw material that may be used in producing it. The rate "per line per thousand of circulation" charged for CHICAGO TRIBUNE advertising is demonstrably low because it is based on manufacturing costs, but the value of TRIBUNE advertising is immeasurably high because it is the sum of circulation plus prestige. Advertisers need this type of medium today, for 1921 Will Reward Fighters.

e Chicago Tribune THE WORLD'S GREATEST NEWSPAPER

Circulation More Than 450,000 Daily-800,000 Sunday

